

Alabama Severe Weather Awareness Week 2006

A storm is coming...



are you ready?

An Annual Educational Effort Sponsored by



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Severe Weather Awareness Week in Alabama

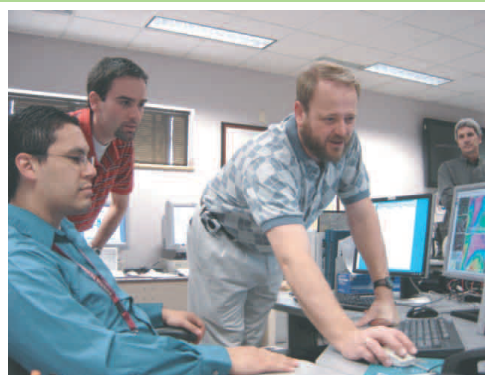
February 19 - 24, 2006

Sunday, February 19th through Friday, February 24th, 2006, has been proclaimed Severe Weather Awareness Week in Alabama by Governor Bob Riley. During this special week, Alabamians are encouraged to learn and/or review the proper safety precautions necessary for protecting their lives during severe weather.

Throughout this week, the National Weather Service, Alabama Emergency Management Agency, and American Red Cross chapters in Alabama will be conducting educational activities to help people learn how to prevent injuries and deaths from lightning, wind, hail, tornadoes, and floods. Media outlets are encouraged to promote this week through articles, stories, and interviews to acquaint people with severe weather dangers and the proper safety precautions necessary for survival.

This booklet contains material on severe weather and ways to prepare for it. Lightning, wind, hail, tornadoes, and floods ALL pose great danger to Alabama. Weather-related disasters do occur annually from these phenomena. After nearly every weather disaster, the story is the same; people survive because they know what to do! By taking a few minutes to learn or review severe weather safety procedures, you could save your life or someone else's.

A statewide tornado drill will be conducted by the National Weather Service and Alabama Emergency Management Agency on Wednesday, February 22nd. The purpose of this drill is to determine if Alabamians can adequately receive a tornado watch and/or warning and to practice the actions necessary for protecting their lives and others in the event of a real tornado. Everyone is encouraged to participate in the drill to make it a meaningful practice. The drill will be postponed to Friday, February 24th if bad weather should occur on Wednesday the 22nd.



National Weather Service employees discuss operations



Governor Bob Riley with
Alabama EMA Director Bruce P. Baughman
Photo courtesy of the Montgomery Advertiser
(Photographer Julie Bennett)



Photo courtesy of the Birmingham chapter of the American Red Cross

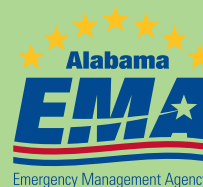
Contents

Page 1 - Overview
Page 2 - Messages / Partner Recognition
Page 3 - Record Breaking Year
Page 4 - Awareness / Preparation
Page 5 - Thunderstorms
Page 6 - Lightning
Page 7 - Damaging Wind & Hail
Page 8 - Tornadoes
Page 9 - Tornadoes by County

Page 10 - Tornadoes by Month and Hour
Page 11 - Flood Types
Page 12 - Flood Safety & Products
Page 13 - Storm Spotters
Page 14 - NOAA Weather Radio
Page 15 - Safety After the Storm
Page 16 - 2005 Year in Review
Page 17 - Contacts
Page 18 - NWS on the Web

Acknowledgements

Front cover photo is a cumulonimbus cloud taken in Walker County on April 25, 2005.
Back cover photo is the Palm Sunday Piedmont tornado taken by Jeff Formby on March 27, 1994.
Graphic Design and Arrangement - Darone Jones
Research and Graphs - Krissy Scotten
Editor - Michael Scotten
Additional booklet input and contribution provided by NWS Birmingham Staff - THANK YOU!
Booklet funding drive was organized by Brian Peters of the Alabama SKYWARN Foundation.



Messages from the National Weather Service and Alabama Emergency Management Agency

The National Weather Service offices serving Alabama invite everyone to get prepared for severe weather. Please use this week to review or develop a family, school, or business emergency action plan. Even though Alabama has two distinct severe weather seasons, spring and fall, severe weather can and does occur every month of the year. So, we must be prepared at all times.

The dedicated people at the National Weather Service are committed to protecting life and property from severe weather through the close coordination of our friends in emergency management, the American Red Cross, and the media. We are here 24 hours a day, 365 days a year, keeping a close watch on the safety of our neighbors.



That's what this week is all about...time to learn...time to review...and time to get ready! It is not *if* we will get more devastating severe weather, it's simply *when*!

*Jim Stefkovich, Meteorologist-in-Charge
National Weather Service, Birmingham*

The Alabama Emergency Management Agency (AEMA) joins Governor Bob Riley, county emergency managers, the National Weather Service, American Red Cross, and Alabama Department of Education each year in the campaign to educate people in our state about severe weather. Alabamians commonly face the threat of natural disasters caused by severe weather. This is why severe weather awareness is so important. Our goal during this week and beyond is to encourage everyone to learn how you and your family can prepare for severe weather. Planning ahead could save your life.



*Bruce P. Baughman, Director
AEMA, Clanton*

Special Thanks to Our Partners

To recognize their commitment to public service and safety, the National Weather Service extends a special thanks to those contributing to the 2006 edition of the Alabama Severe Weather Awareness Week Booklet:



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American
Red Cross



Severe Weather Awareness Week in Alabama is an annual public awareness campaign to draw attention to severe weather preparedness. Since its inception by the National Weather Service 31 years ago following the April 3-4, 1974, super-outbreak of tornadoes, this week has been observed each year as part of a continuing commitment to improve severe weather awareness. The National Weather Service has traditionally led this campaign, but additional partners have joined to improve and expand this effort to reach Alabamians with this important information.

Record Breaking Year for Tornadoes Across Alabama

Alabama observed a record-breaking total of 77 tornadoes during 2005. This large number of tornadoes surpassed the previous record of 56 tornadoes which occurred in 2004.

The 2005 hurricane season, the most active on record, is largely responsible for Alabama's record-breaking year for tornadoes. During 2005, 49 of the 77 tornadoes resulted from tropical systems affecting the state. In fact, 23 tornadoes occurred on September 25th due to Hurricane Rita with 10 tornadoes touching down in Tuscaloosa County alone.

Advances in technology have allowed meteorologists to go into the field to survey severe storm damage. With the help of science and technology, more training has been developed on surveying storm damage. Only a decade ago, NWS meteorologists were frequently unable to go into the field, so many severe weather reports were taken as truth and not surveyed by experts.

Years with Over 50 Tornadoes

1957	2001
1973	2004
1974	2005
1998	

Tornadoes During 2005 by NWS Office Area

2 - North Alabama (HUN)
57 - Central Alabama (BMX)
17 - Southwest Alabama (MOB)
1 - Southeast Alabama (TAE)

Dates of 2005 Tornado Outbreaks (5 or more tornadoes)

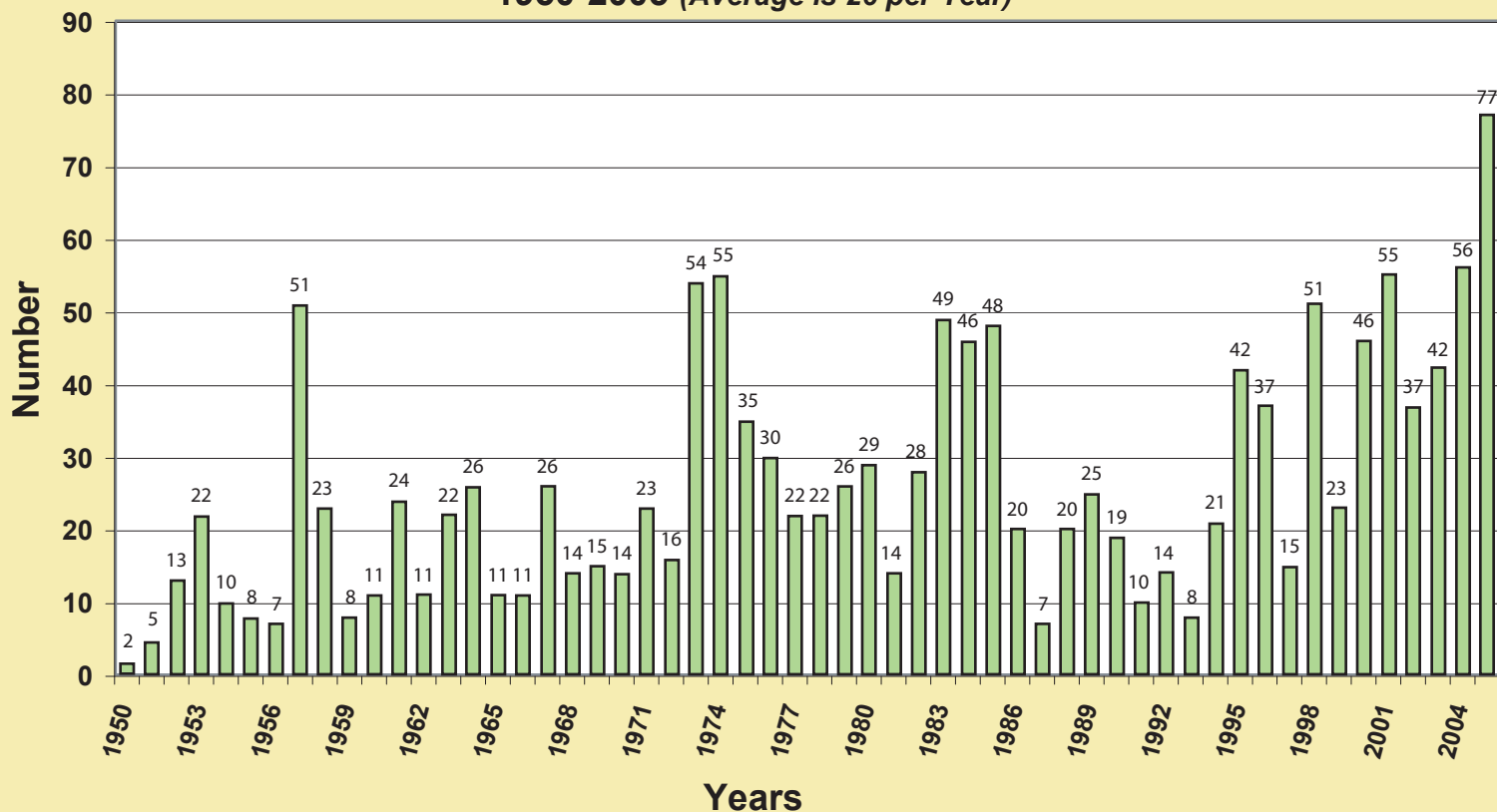
April 30
July 6
August 28-29
September 25
November 28

Dates and Number of Tornadoes From 2005 Tropical Systems

July 6 (Cindy)	16
August 28-29 (Katrina)	10
September 25 (Rita)	23

Alabama Tornado Count by Year

1950-2005 (Average is 26 per Year)



Awareness Starts With You

Basic severe weather preparedness plans must include:

- 1) A thorough knowledge of safety rules
- 2) Designation of the best available shelter
- 3) A reliable method of communication to receive and exchange information
- 4) An emergency supply kit
- 5) Drills to test and practice the plan

Preparing for severe weather is the theme of Severe Weather Awareness Week, so how do we go about it? Preparedness plans come in all sizes as dictated by individual and collective needs. Do you know the basic safety rules? Would your children know what to do if home alone? Are plans ready to move elderly or disabled people to shelter quickly? What is your best source for obtaining warning information?

Preparedness is the key in dealing with any weather hazard!

The primary mission of the National Weather Service is to warn of impending hazardous weather. Overall, the warning system continues to get better. Improvements in radar, satellite, and computer systems have helped to detect weather phenomena over smaller areas in shorter periods of time. The Internet and an expanded NOAA Weather Radio All Hazards network have allowed nearly everyone to receive the most current weather information. However, these efforts will fail if you do not know what to do or where to go! Remember, severe weather can develop undetected, and advance warning time may only be a few minutes. Everyone needs the knowledge to react quickly and a plan of action when severe weather materializes.

Resolve to Be Ready in 2006 – Jefferson County Citizen Corps Council, along with other Citizen Corps Councils throughout the state, urges Alabama citizens to make emergency preparedness a **top priority**.

The mission of the Jefferson County Citizen Corps Council, like other county Citizen Corps Councils across Alabama, is to harness the power of every individual through education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds within Jefferson County and the rest of Alabama.

The programs under the Jefferson County Citizen Corps Council are Community Emergency Response Teams (CERT), Neighborhood Watch, Medical Reservoir Corps (MRC), Fire Corps, and Volunteer In Police Service (VIPS).

To find out more about the programs listed under Citizen Corps Council or how you can **Be Ready in 2006** for a disaster, contact your local emergency management agency or log on to www.citizencorps.gov.



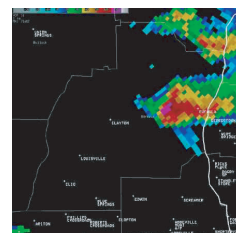
Your local emergency management agency, National Weather Service office, or American Red Cross chapter can help with your planning. Severe weather safety information is available upon request.

Watch vs. Warning

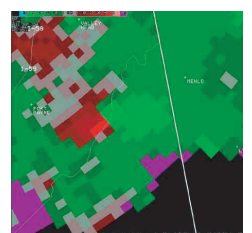
A **Watch** means that **conditions are favorable** for severe thunderstorm or tornado development. **This is the time to be weather-aware.** You should keep alert by listening to radio, television, or weather radio for the latest weather information. Know where your children are. Be aware of where you will go and what you will do if a severe thunderstorm or a tornado threatens.



A **Warning** means a severe thunderstorm or tornado **has been sighted or indicated by radar.** People in the path of the storm should take immediate life-saving actions.



Hail spike near Eufaula (Barbour County)
December 28, 2005
(note the 3 lines southeast of storm)



F0 tornado on DeKalb/Cherokee County Line
April 22, 2005

Thunderstorms in Alabama



Thunderstorms are a common occurrence in Alabama. Although they can strike anytime, thunderstorms are most frequent in the spring and summer months, between March and August. Lightning, damaging wind, large hail, tornadoes, and flash floods are the hazards from thunderstorms.

The best defense against thunderstorms is to stay inside a substantial building. Shelters can protect you from deadly lightning, wind, large hail, tornadoes, and heavy rain. Fortunately, thunderstorms do not usually last a long time and will generally pass by in less than an hour. When thunderstorms are expected, be sure to pick up loose objects around your home or business before the storms arrive as they can become dangerous projectiles in strong winds.

Thunderstorms are categorized into three main types: Single-cell, Multicell (Squall Line), and Supercell.

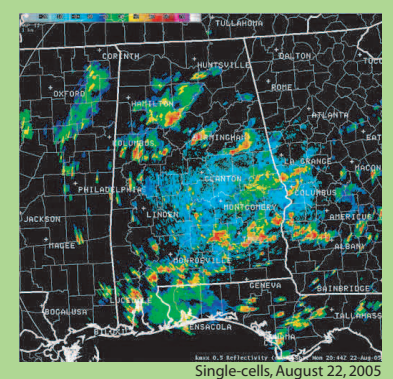
Single-cell thunderstorms, also known as pulse, airmass, or summertime thunderstorms, are individual cells or unorganized clusters of thunderstorms that are not usually severe. Frequent lightning strikes and locally heavy rainfall capable of producing floods are the main hazards from these storms. These typically slow-moving storms usually occur in the summer when the air is warm, moist, and unstable, and winds are weak.



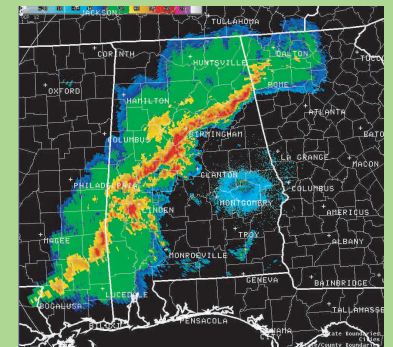
Severe Thunderstorm - A thunderstorm producing tornadoes, wind at or above 58 mph, and/or penny size hail (3/4 of an inch in diameter) or larger.

Multicell thunderstorms and squall lines are organized complexes of thunderstorms that cover large areas and great distances. These storms are often severe. Damaging wind is the main hazard since they move rapidly. Tornadoes, hail, and heavy rainfall capable of producing flash floods are possible with these storms as well. Squall lines are most common during the active spring and fall severe weather months of March, April, May, November, and early December.

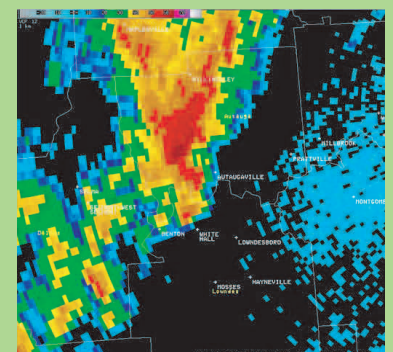
Supercell thunderstorms are the most dangerous category of thunderstorms. They can produce long-lived tornadoes, winds in excess of 100 mph, and very large hail. Fortunately, they are not common, and they usually cover small areas. At times, they can be embedded in clusters of thunderstorms or squall lines. Just like squall lines, supercells are most frequent during the active spring and fall severe weather months of March, April, May, November, and early December.



Single-cells, August 22, 2005



Squall Line, April 30, 2005



Tornadic Supercell (Autauga County), November 28, 2005



Lightning



EVERY THUNDERSTORM contains lightning. The electrical charge of a lightning strike, which may reach 300 million volts, searches for the path of least resistance to complete the circuit from the cloud. It might strike you, an isolated tree, or an object in the open. Keep in mind that you do not have to be standing directly beneath a cloud to be struck. Lightning can strike under clear skies as long as the parent thunderstorm cloud is nearby.

Lightning has been called "the underrated killer" since it does not usually get as much headline attention compared to other dangerous weather phenomena. Nationally, about 100 deaths and 500 injuries on average occur as a result of lightning strikes. In a typical year, lightning will strike over 20 million times and will claim more victims than tornadoes or hurricanes. Between 1995 and 2005 in Alabama, 99 injuries and 20 deaths have been attributed to lightning.

Anyone outdoors is particularly vulnerable to lightning. To keep people safe when lightning is in the area, every person, group, or school involved in outdoor activities should have a plan that can be activated. Take time to learn lightning safety rules. A quick dash out in the open with a nearby thunderstorm may unnecessarily expose you to the possibility of being struck. Is it worth the risk?

The 30/30 Lightning Safety Rule could save your life!

The first '30' means that you need to take cover if you hear thunder within 30 seconds of seeing the lightning flash.

The second '30' means that you should wait at least 30 minutes after the last lightning flash or thunder clap to resume normal outdoor activities (the "all clear" signal).

Lightning Safety

- Get indoors in a strong sturdy building! (Most motor vehicles provide good shelter from lightning as well.)
- Stay away from windows.
- Avoid using the phone except for emergencies.
- Avoid high places, open fields, isolated trees, unprotected gazebos, rain or picnic shelters, baseball dugouts, towers, flagpoles, light poles, bleachers, metal fences, convertible vehicles, golfcarts, motorcycles, scooters, and lawn mowers.
- Move away from bodies of water.

- Stay away from metallic objects such as fences, clotheslines, or pipes.
- In open areas, go to a low place such as a ravine or valley. Be alert for flooding.
- In a forest, seek shelter in a low area under a thick growth of small trees.
- If you feel your hair stand on end, lightning may be about to strike you. To lower the chances of getting directly struck, crouch down low, but do not lie flat on the ground.



Remember, there is no truth to the old myth that "lightning never strikes twice in the same place."

Damaging

Wind & Hail



Butler County, May 3, 2005

Straight-Line Damaging Wind

Straight-line damaging wind does occur in some thunderstorms each year in Alabama. They may down trees and power lines, overturn mobile homes, and cause damage to well-built structures.

Storm reports immediately after a severe weather event usually attribute significant damage to a tornado when actually strong straight-line wind is responsible. In fact, straight-line wind events are more common than tornadoes in Alabama. During a typical year, Alabama experiences straight-line wind events 10 to 20 times more than tornado events.

Downburst

Another type of non-tornadic damaging wind from thunderstorms is a downburst. A downburst refers to a very small area of rapidly descending air beneath a thunderstorm that strikes the ground, producing isolated areas of significant damage from high wind. Wind speeds in downbursts usually exceed 60 mph and can exceed 100 mph on rare occasions. Just like a tornado, they may be accompanied by a loud roar. As a result, downbursts are often mistaken as tornadoes.

Downbursts mainly occur during the summer months in a few afternoon thunderstorms. The combination of warm, moist, unstable air near the surface and cool, dry air at the mid-levels of the atmosphere supports downbursts in thunderstorms.

Since downbursts develop quickly in only a few select thunderstorms, they are very difficult to detect and usually occur with little or no advance notice.



Even the National Weather Service is not immune from damaging winds.
(WSR-88D Doppler Radar)

Hail

Although hail forms in every thunderstorm that develops, it only reaches the ground if the atmospheric conditions are favorable. Hail typically has the best chance of falling to the ground in springtime thunderstorms when the atmosphere is colder, especially at the mid and high levels. Hail may take on many different sizes and shapes such as that of a thin flat penny or that of a baseball.

Large hail can be very dangerous. It can cause damage to objects such as motor vehicles, structures, and trees. Bodily injuries or even deaths can result if people are caught outdoors when large hail occurs.



Montgomery (Montgomery County), April 5, 2005

Tornadoes

Tornadoes are violently rotating columns of air that descend from thunderstorm clouds to come in contact with the ground. They typically develop when the following atmospheric ingredients come together:

- warm, moist, unstable air near the surface
- strong atmospheric winds
- a nearby low pressure disturbance to lift the air and create thunderstorms

Most tornadoes in Alabama occur during the two severe weather seasons in the spring and fall. The spring severe weather season occurs in March, April, and May, while the fall severe weather season occurs in November and early December. Tornadoes typically occur during the warmest part of the day between noon and 8 pm. However, they have occurred in every hour of the day and night. Therefore, Alabamians are encouraged to be prepared at all times when there is any potential for tornadoes.

Tornadoes have wind speeds that vary from as little as 50 mph to speeds over 200 mph. They move with the thunderstorms that produce them, with forward speeds ranging from nearly stationary to 70 mph. Most tornadoes travel from the southwest toward the northeast.



F1 Tornado, (Tuscaloosa County)
September 25, 2005
(photo by Stephen McCloud and Heather Hope
of Baron Services)

Remember, tornadoes form quickly! You may have only a few seconds to react and find shelter. When a tornado threatens, your immediate action can save your life! Know what to do and where to go!

Safety Rules

BE Calm
Smart
Safe



In homes or small buildings:

Go to the basement or a small interior room, such as a closet, bathroom, or interior hallway on the lowest level. Get under something sturdy like a heavy table, if available. Protect yourself from flying debris with pillows, heavy coats, blankets, or quilts. Use bicycle or motorcycle helmets to protect your head.



Stay away from windows, doors, and outside walls!

Do not bother opening or closing windows and doors as this will not protect the structure. This will cause you to waste valuable time which may put yourself and possibly others at greater risk. Use those valuable seconds to find a place of safety. Remember to protect your head!

In schools, nursing homes, hospitals, factories, and shopping centers:

Go to a pre-designated shelter area. Basements are best, but interior hallways on the lowest floor usually offer protection. Close all doors to the hallway to ensure the best protection.



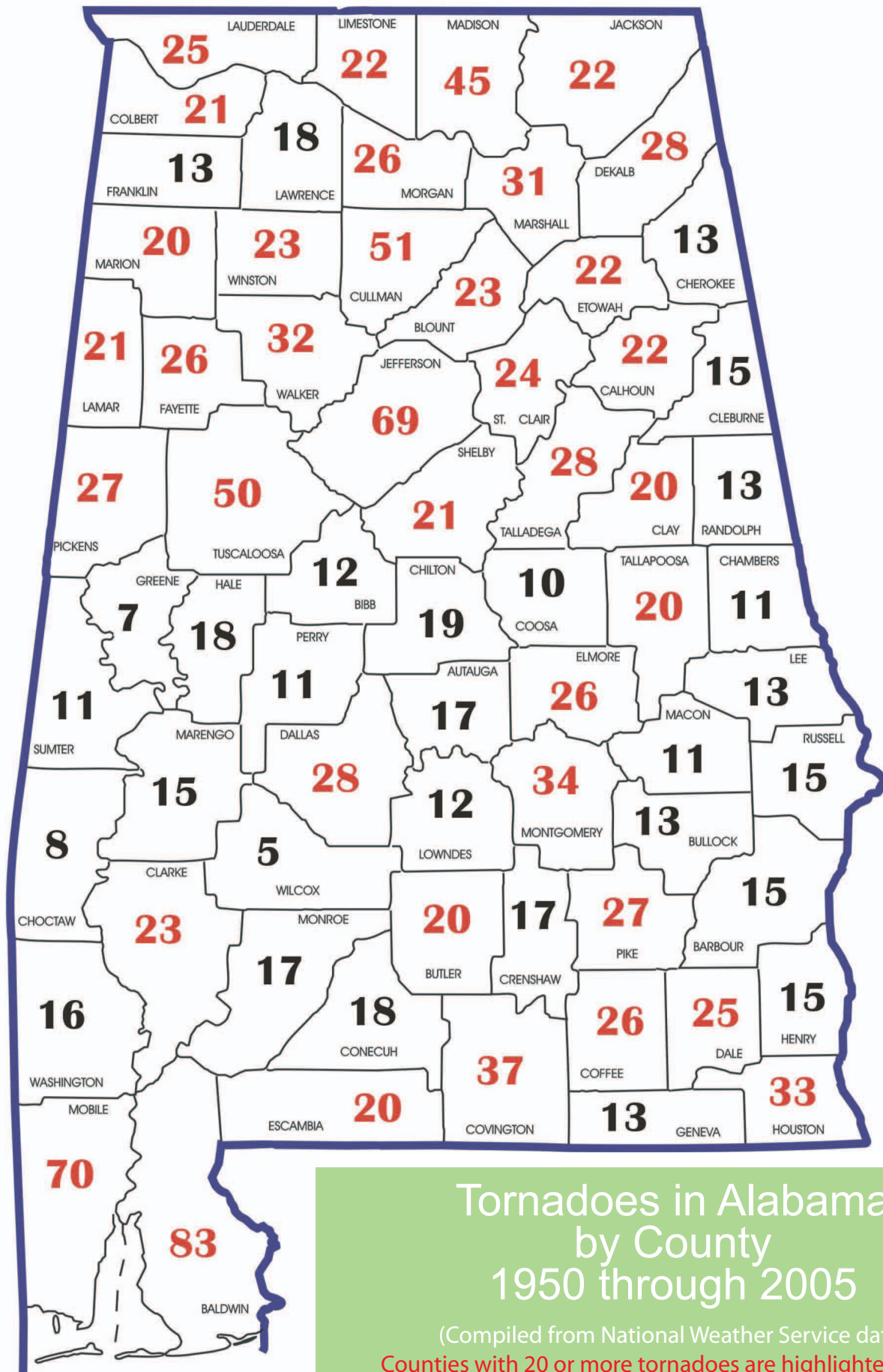
In mobile homes or vehicles:

Leave them and go to a strong building. If there is no shelter nearby, get into the nearest ditch, depression, or underground culvert and lie flat with your hands shielding your head.



Tuscaloosa County, September 25, 2005
(photo by Stephen McCloud and Heather Hope of Baron Services)

Tornadoes by County in Alabama



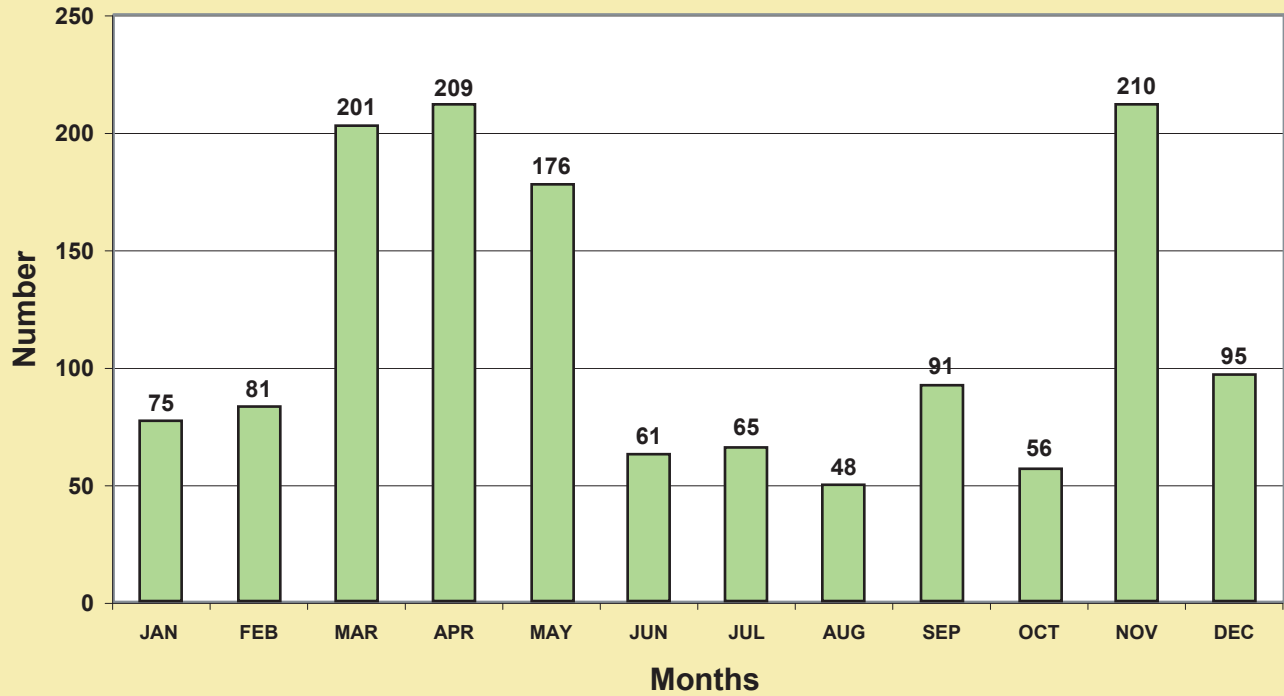
Tornadoes in Alabama
by County
1950 through 2005

(Compiled from National Weather Service data)

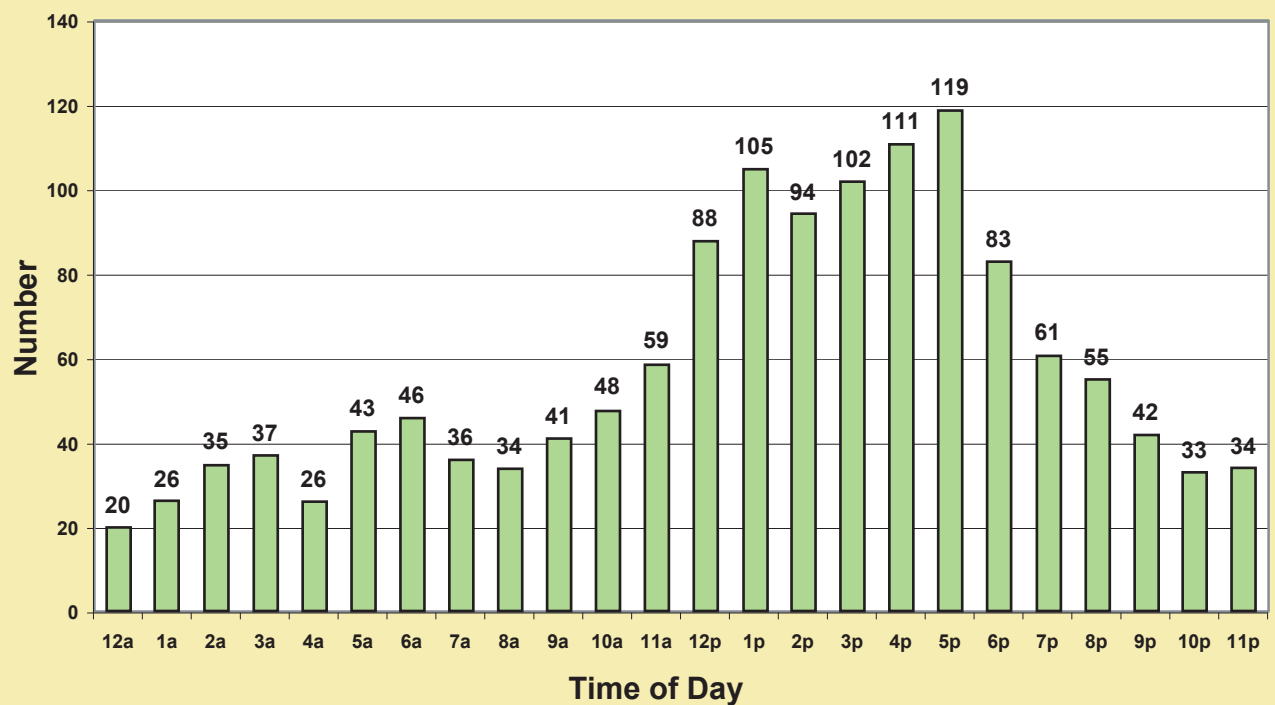
Counties with 20 or more tornadoes are highlighted in red.

Tornadoes by Month and Hour

**Tornadoes by Month
1950-2005**



**Tornadoes by Hour
1950-2005**



Floods

Believe it or not, floods are the most damaging, costly, and deadly weather-related phenomena. Each year, they cost the U.S. over \$2 billion in property damage and cause roughly 150 deaths.

All of Alabama is vulnerable to floods anytime of the year. Due to Alabama's close proximity to the Gulf of Mexico, the state has an almost unlimited supply of moisture available. When low pressure systems move into the area and combine with this moisture, the resulting rains can be heavy and produce floods. Also, slow-moving summertime thunderstorms can produce flooding rains in a very short period of time.



Vestavia (Jefferson County), July 14, 2005



Mobile (Mobile County), August 29, 2005



Catoma Creek (Montgomery County), March 28, 2005

Flash Flood

Flash floods can occur within a few minutes or hours of heavy rainfall or from a dam or levee failure. These floods can destroy structures, down trees, roll boulders, and create new waterways. Rapidly rising water can reach heights of 30 feet or more! Furthermore, flash flood producing rains can also trigger catastrophic mudslides. You may not always have a warning of these sudden and deadly floods.

Urban Flood

Floods can be magnified in urban areas. As land is converted from fields and woodlands to roads and parking lots, it loses its ability to absorb rainfall. Urbanization increases runoff two to six times over what would occur on natural terrain. During periods of urban flooding, streets can become swift moving rivers, while basements can become death traps as they fill with water.

River Flood

River floods are a natural and inevitable part of life in Alabama. Low lying areas near rivers, streams, lakes, and reservoirs are susceptible to river floods. Some river floods occur seasonally when winter or spring rains fill river basins with too much water too quickly. Others can occur from slow-moving low pressure systems. Torrential rains from decaying hurricanes or tropical systems can also produce river floods.



Flood

Safety & Products

Flood Safety Rules

* **Move to higher ground and stay away from low-lying areas such as streambeds, drainage ditches, and culverts.**

Heavy rainfall or dam/levee failure may cause excessive water to run off rapidly, overflowing natural and man-made drainage systems with rushing flood waters. These flood waters may carry debris that can cause serious injury or even death.

* **Stay out of flooded areas.**

In flooded areas, water may still be rising and is usually swift. Children are especially vulnerable and should not be allowed to play or walk in flowing water. Only 6 inches of fast-moving water is necessary to sweep you off your feet.

* **Never drive your vehicle into water of unknown depths or around barricades.**

Many flood deaths occur when people drive their vehicles into flood waters. Flood waters may rise very quickly and could cover the vehicle or sweep it away. Just 2 feet of water can move most vehicles, including buses and trucks. If your vehicle stalls, abandon it and immediately seek higher ground.

* **Be especially cautious at night when it is harder to recognize flood dangers.**

Water is a very powerful force and should never be underestimated!



Lacey Spring area (Morgan County) , December 2004

Types of Flood Watches and Warnings Issued by the National Weather Service



Watches

FLASH FLOOD WATCH - issued when conditions are favorable for flash flooding (sudden short-term flooding that lasts less than 6 hours). This includes floods from dam or levee failures.

FLOOD WATCH - issued when conditions are favorable for long-duration flooding (longer than 6 hours). This includes river flooding.

Warnings

FLASH FLOOD WARNING - issued when flooding occurs or is imminent within 6 hours of the event.

FLOOD WARNING - issued when flooding occurs or is imminent and is expected to persist for more than 6 hours.

RIVER FLOOD WARNING - issued when a flood is occurring or expected to occur near streams, rivers, lakes, or reservoirs.

Storm Spotters

Storm spotters play a vital role in the warning system. They come from all walks of life, joined by their interests in weather and community service. Spotters are associated with SKYWARN, a volunteer program developed by the National Weather Service (NWS) to train and organize spotters. Spotters are organized around local emergency management agencies, amateur radio clubs, personnel from fire departments, rescue squads, and law enforcement agencies, and public participants.



Warning Coordination Meteorologist Jason B. Wright presenting a Storm Spotter Class

Spotters are critical because they provide timely information on the actual weather that is occurring at or near the ground. This information is known as ground truth. Satellite imagery and Doppler radar provide NWS meteorologists with large amounts of information about storm structure but not on the actual weather occurring at or near the ground. This is where spotters become the eyes and ears for their communities.

Storm spotters go through training provided by the NWS to gain an understanding of thunderstorm structure, Alabama tornado climatology, exposure to visual clues, tornado safety, and procedures for reporting information.

Amateur radio operators compose one of the largest groups of spotters in Alabama because of their ability and willingness to communicate using their radios even when conventional power and communication methods are knocked out. NWS offices across the state have established working relationships with the amateur radio community by including radio equipment in the offices to communicate with spotters.

Additional information on storm spotter activities can be found on the NWS internet web sites (see page 17) and at www.alert-alabama.org.

The Alabama SKYWARN Foundation, Inc., is a non-profit organization established to promote severe weather safety in Alabama. Each year, Alabamians are faced with a variety of severe weather threats ranging from winter storms to tornadoes. One key to keeping the toll in deaths and injuries to a minimum is education. By understanding the dangers and knowing the proper safety precautions ahead of time, Alabamians can respond quickly and appropriately when those dangers threaten.

The Alabama SKYWARN Foundation relies on donations to defray the costs in these efforts. These donations are tax deductible. The Foundation is especially pleased to recognize the support of Mercedes-Benz International, the American Red Cross Birmingham Chapter, and Russell Corporation for their direct support in making this annual publication possible.

The Foundation has hopes as added resources become available to help in other ways to improve severe weather safety and awareness in Alabama. NOAA Weather Radio All Hazards receivers can be purchased for distribution to people who are unable to afford them, especially in rural areas where outdoor sirens are less practical. Storm spotters provide valuable reports during warning situations, and many of these efforts need support since they are primarily voluntary.

More information about the Alabama SKYWARN Foundation can be found at

www.alabamaskywarn.org.





Voice of the National Weather Service

NOAA Weather Radio All Hazards (NWR), the voice of the National Weather Service (NWS), provides updated weather information continuously, 24 hours a day, 365 days a year. Watches, warnings, advisories, forecasts, current weather conditions, and climate data are broadcast in three to five minute cycles on NWR stations across the nation. Alabama is served by 29 transmitters; this places approximately 95 percent of Alabama citizens within range of a weather radio transmitter.

To receive the NWR broadcasts, a special radio capable of receiving signals in the Very High Frequency (VHF) public service radio band is required. Seven frequencies from 162.400 to 162.550 megahertz (MHz) are used. Weather radios can be purchased at most electronics stores. Prices of these radios vary from location to location and depend on the type of radio purchased.



Location Frequency (MHz)

Arab	162.525
Auburn	162.525
Bethlehem, FL □	162.450
Birmingham	162.550
Blakely, GA	162.525
Brewton	162.475
Columbus, GA	162.400
Cullman	162.450
Demopolis	162.475
Dozier	162.550
Florence	162.475
Fort Payne	162.500
Greenville	162.425
Huntsville	162.400
Jackson	162.500
La Grange, GA	162.450
Leakesville, MS	162.425
Meridian, MS	162.550
Mobile	162.550
Montgomery	162.400
Mt. Cheaha	162.475
Oneonta	162.425
Pensacola, FL	162.400
Selma	162.450
Summerville, GA	162.450
Texasville	162.475
Tuscaloosa	162.400
Winchester, TN	162.525
Winfield	162.525

NOAA Weather Radio All Hazards is useful anytime, but it becomes more important during severe weather. During threatening weather, normal broadcasts are interrupted, and the focus is shifted to the local severe weather threat. Watches, warnings, and statements are given the highest priority and are frequently updated. A feature available in new weather radio receivers called SAME, Specific Area Message Encoding, allows weather radios to be programmed for the reception of critical information for select counties in your area.

NWR is a major part of the Emergency Alert System (EAS) that disseminates critical warning information rapidly through commercial broadcast outlets. In an emergency, each NWR station will transmit a warning alarm tone signal followed by information on the emergency situation. This signal is capable of activating specially designed receivers by increasing the volume or producing a visual and/or audible alarm. Though not all weather band receivers have this capability, all weather radios can receive the emergency broadcasts. The warning alarm device is normally tested each Wednesday between 11 am and noon, weather permitting.

Media are urged to use NWR and may freely rebroadcast radio transmissions.

Safety After the Storm

Safety does not stop after the storm has passed. Everyone should be aware of the many dangers that might exist after bad weather has moved out of the area.



Autaugaville (Autauga County), November 24, 2004

- 1) Remain calm!**
- 2) Deal with immediate problems such as protecting ☐ yourself and others first, then attend to those who ☐ are injured until professional help arrives.**
- 3) Locate your emergency supply kit containing essential documents and materials for taking care of yourself and others.**
- 4) Do not light matches, burn candles, or turn on electrical switches if you suspect damage to your home or business as any of these can ignite fires.**
- 5) Carefully check for damage around your home or business.**

Trees and tree limbs may be weakened and could fall unexpectedly, so use caution when walking through areas where high wind or tornadoes have passed through.

STAY AWAY FROM DOWNED POWERLINES. Do not attempt to touch or move them. Keep children and pets away. Report downed wires to your local power company.

If you smell gas or suspect a leak, turn off the main gas valve, open windows, and get everyone out of the structure quickly.

- 6) Clean up or rope off dangerous areas.**
- 7) Be sure not to forget about caring for pets after a disaster has occurred.**



Tuscaloosa County, September 25, 2005 (Photo courtesy of the Tuscaloosa News)



Blanch (Cherokee County), April 22, 2005



Huntsville (Madison County), November 15, 1989



Barbour County, January 13, 2006

2005 - Alabama Year in Review

the numbers

Warnings Issued for Alabama by the National Weather Service :

Tornado Warnings 311
Severe Thunderstorm Warnings 1101
Flash Flood Warnings 312
Total 1724

The Annual Average Number of Warnings (1995-2004):

Tornado Warnings 195
Severe Thunderstorm Warnings 834
Flash Flood Warnings 132
Total 1161

During 2005 in Alabama, tornadoes, thunderstorm wind damage, severe hail, and/or flash floods were reported on 76 days. Although the number of severe weather days was virtually identical to 2004, severe weather affected twice as many locations in 2005. The following is a list of each day that any place in Alabama received one or more of the severe weather events mentioned above.

January 7 - T	July 5 - F
January 13 - W	July 6 - TWHF
January 29 - W	July 8 - H
February 21 - WHF	July 9 - F
February 22 - H	July 10 - F
March 7 - W	July 12 - WF
March 13 - TWH	July 14 - WF
March 22 - TWH	July 19 - WF
March 26 - WH	July 20 - WF
March 27 - WHF	July 21 - WF
March 30 - H	July 22 - WF
March 31 - WHF	July 27 - WF
April 1 - WHF	July 29 - W
April 6 - TWHF	August 5 - WH
April 7 - H	August 6 - W
April 11 - W	August 9 - F
April 21 - WH	August 12 - WF
April 22 - TWH	August 13 - WHF
April 26 - H	August 14 - W
April 30 - TWHF	August 15 - WHF
May 5 - H	August 16 - WH
May 10 - H	August 17 - WH
May 14 - W	August 21 - WH
May 19 - WH	August 22 - WH
May 20 - WHF	August 28 - T
May 24 - W	August 29 - TF
May 29 - W	September 15 - W
May 31 - T	September 23 - W
June 2 - WHF	September 24 - W
June 6 - WHF	September 25 - TWF
June 8 - WF	September 26 - T
June 11 - F	October 21 - H
June 15 - WH	November 14 - T
June 20 - WH	November 15 - TWH
June 27 - W	November 28 - TWH
July 1 - WHF	December 4 - WH
July 2 - W	December 24 - H
July 4 - WHF	December 28 - H

T - tornado, W - thunderstorm wind damage, H - severe hail, F - flash flood

Three days of the year had reports of all four hazards. Those days were:

April 6
April 30
July 6

Tornadoes were reported on 15 days in 2005 across Alabama. Those days were:

January 7
March 13
March 22
April 6
April 22
April 30
May 31
July 6
August 28
August 29
September 25
September 26
November 14
November 15
November 28

Thunderstorm wind damage was reported on 55 days in 2005.

Severe hail was reported on 40 days in 2005.

Flash floods were reported on 30 days in 2005.

Contacts for More Information

This booklet contains valuable materials concerning Severe Weather Awareness Week. You are invited to contact National Weather Service (NWS) offices, state and county emergency management agencies, and local American Red Cross chapters for interviews and answers to your questions. **National Weather Service personnel are available for severe weather awareness programs to civic and industrial organizations, schools, hospitals, and others interested in severe weather safety, as well as office tours.** Representatives of your local emergency management agency and the nearby American Red Cross chapter may also be available for assistance. For more information, contact the National Weather Service office serving your area, your county or state emergency management agency, or your nearby American Red Cross chapter.



Office tour at NWS Huntsville



Open house at NWS Birmingham

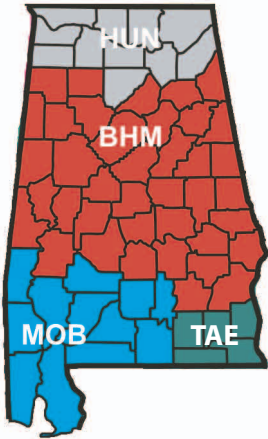


Office tour at NWS Mobile



Weather presentation by NWS Tallahassee

Each county in Alabama is served by a National Weather Service office as identified here:



North Alabama

Colbert, Cullman, DeKalb, Franklin, Jackson, Lauderdale, Lawrence, Limestone, Madison, Marshall, and Morgan counties, contact:

Tim Troutman or Mike Coyne in Huntsville (HUN) at 256-890-8503
www.srh.noaa.gov/hun

Central Alabama

Autauga, Barbour, Bibb, Blount, Bullock, Calhoun, Chambers, Cherokee, Chilton, Clay, Cleburne, Coosa, Dallas, Elmore, Etowah, Fayette, Greene, Hale, Jefferson, Lamar, Lee, Lowndes, Macon, Marengo, Marion, Montgomery, Perry, Pickens, Pike, Randolph, Russell, St. Clair, Shelby, Sumter, Talladega, Tallapoosa, Tuscaloosa, Walker, and Winston counties, contact:

Jason B. Wright or Jim Stefkovich in Birmingham (BHM) at 205-664-3010
www.srh.noaa.gov/bmx

Southwest Alabama

Baldwin, Butler, Choctaw, Clarke, Conecuh, Covington, Crenshaw, Escambia, Mobile, Monroe, Washington, and Wilcox counties, contact:

Gary Beeler or Randall McKee in Mobile (MOB) at 251-633-6443
www.srh.noaa.gov/mob

Southeast Alabama

Coffee, Dale, Geneva, Henry, and Houston counties, contact:

Bob Goree or Paul Duval in Tallahassee, FL (TAE) at 850-942-8833
www.srh.noaa.gov/tae

For the Alabama Emergency Management Agency, contact Scott Adcock in Clanton at 205-280-2247.

For the American Red Cross, contact your local chapter or Cindy Bahri in Birmingham at 205-458-8263.

For the Alabama Department of Education, contact the Information & Communication Office in Montgomery at 334-242-9950.

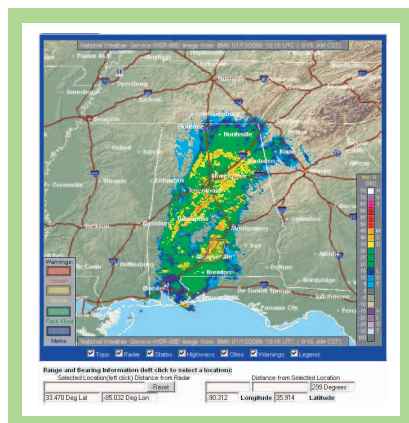
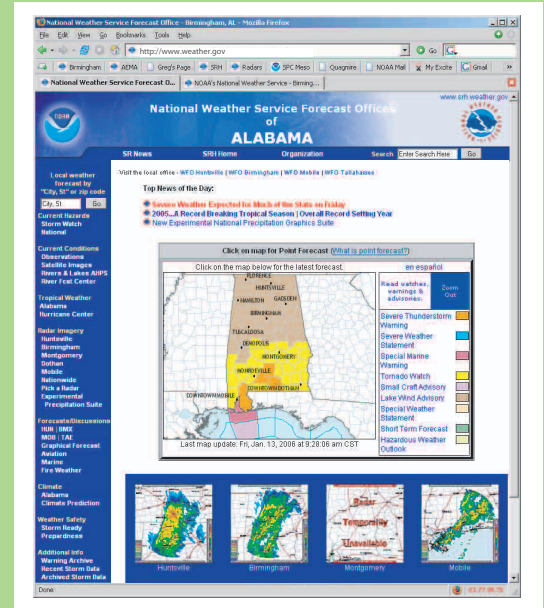
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NWS on the Web

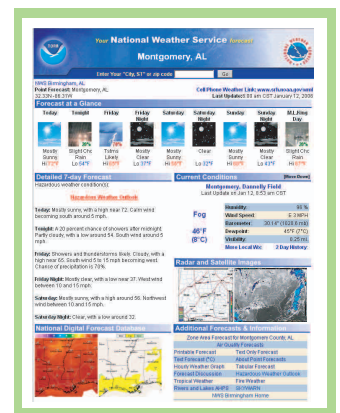
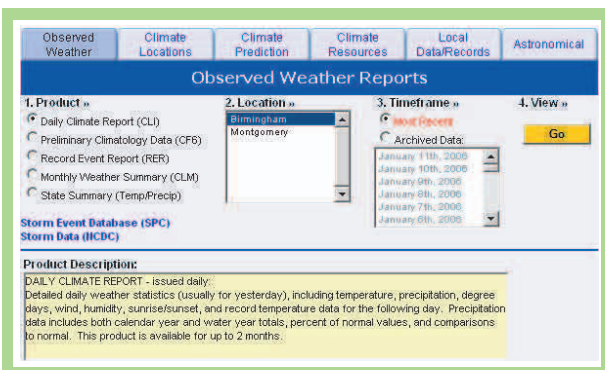
The National Weather Service (NWS) is dedicated to providing the most up-to-date weather information to each and every community. This is accomplished by using a vast array of the latest technology. Meteorologists are staffed 24 hours a day, 7 days a week, and 365 days a year. They perform a wide range of duties from issuing warnings on the most life threatening storms to the pleasant task of issuing a sunny day forecast. Once a warning or forecast has been issued, it is disseminated through a multitude of communication networks including weather wires, NWS Weather Radio All Hazards, and the Internet.

One of the areas that is the most accessible for the public is the award winning NWS Internet site. Nowhere else will you find such complete, in-depth coverage of your local weather. For any location in the United States, a network of 122 offices provides you all of your weather needs in a standardized, easy to navigate website. Whether you are seeking radar, climate, or forecast information, the site provides a one-stop shopping point. In addition to those features, every NWS internet site has a clickable weather status map. This map displays all current watches, warnings, statements, and advisories, quickly alerting you of any weather threats that may be occurring in your area. That's just the front page...



Radar data can easily be accessed and displayed using the innovative RIDGE (Radar Integrated Display with Geospatial Elements) radar webpage. This page allows you to view reflectivity, velocity, and rainfall accumulation data. Also, it allows the user to combine radar images with topography maps, highways, county boundaries, and even warning area outlines issued by the NWS. You can customize what you want to see by toggling overlays and viewing static or looping images which can then be zoomed in or out. In addition, GIS users can incorporate radar images into their data layers.

Another web feature is the point-and-click forecast map which allows you to retrieve customized weather forecasts using the NWS National Digital Forecast Database (NDFD). NDFD incorporates high resolution graphical forecasts of precipitation, temperature, wind, and sky cover across the entire nation. From this expansive database, you can get as detailed as one-hour forecasts for your location or regional graphical forecasts for the next seven days.



A new standardized climate page has been implemented to make it easier for you to find climate information anywhere across the nation. Daily, monthly, and yearly climate reports, regional and state summaries, record events, seasonal outlooks, drought and astronomical information, and much more can effortlessly be found on this new page.

www.weather.gov